

Territory Manager Whitepaper

By

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Introduction

Many Small Medium Businesses (SME) operate their businesses within predefined geographic areas called 'Territories'. This is extremely important in the Franchising market space. Some Franchisors have legal requirements to precisely define Territories when it comes to selling Franchise Areas to its members (Franchisees). Franchisee Territories are extremely important to ensure that there are no conflicts within the Franchisee community.

Territory management has two major aspects that need to be considered. The first is to define the areas on a map that clearly depicts and documents each Territory ensuring no territory overlaps whilst maintaining a complete coverage of the Franchisor's area. The second is to determine which Franchisee a job enquiry should be allocated based on the location of that job.

This paper describes one such solution based on NuMaps technology.

Defining Territories – Territory Manager

NuMaps provides an online mapping subscription service to its clients that allows them to interactively collect ABS statistical areas (Meshblocks, Statistical Areas Level 1 (SA1), Suburbs, Postal Areas and others) into a territory which can be saved and retrieved under a user-specific login. The user typically will build several territories within a specific Franchisor area on a map. These statistical areas are intelligent in that they are linked to attribute data such as population counts, dwelling counts and many other census derived statistics. When spatially aggregating areas (e.g. meshblocks) the user can observe the accumulation of these counts as areas are added/removed from the collection (see Fig 1.). The user interactively creates a search boundary that they can also dynamically 'stretch' in or out, removing and adding areas and recalculating the population and dwelling counts each time. This enables the user to try to keep territories approximately the same 'size' in say dwelling counts as well as deciding which areas should be included or not. Interactive tools to help this process are extremely important as this process is time consuming yet fundamentally important in the whole Territory Management process.

Once the user is satisfied that the territory build is complete on the map, they then save the territory with appropriate identification attributes. The user can, at any time, retrieve and edit the territory by easily adding or subtracting individual statistical areas on the map. This process is typically used if there are gaps/overlaps between homogeneous territories or if there are any Franchisee negotiated changes required. Part of saving the territory is to build a territory boundary that can be used in the second process of job allocation – the Territory Finder process. These boundaries are automatically generated by merging all the associated areas into a single area and the coordinates of this boundary are then saved in the Territory file which is stored in the user's private folder. The system also supports multiple overlapping Franchise Types (e.g. Lawnmowing, house cleaning, pool servicing, etc.) within an existing Franchisor area that can be managed individually in separate folders based on the same source data.

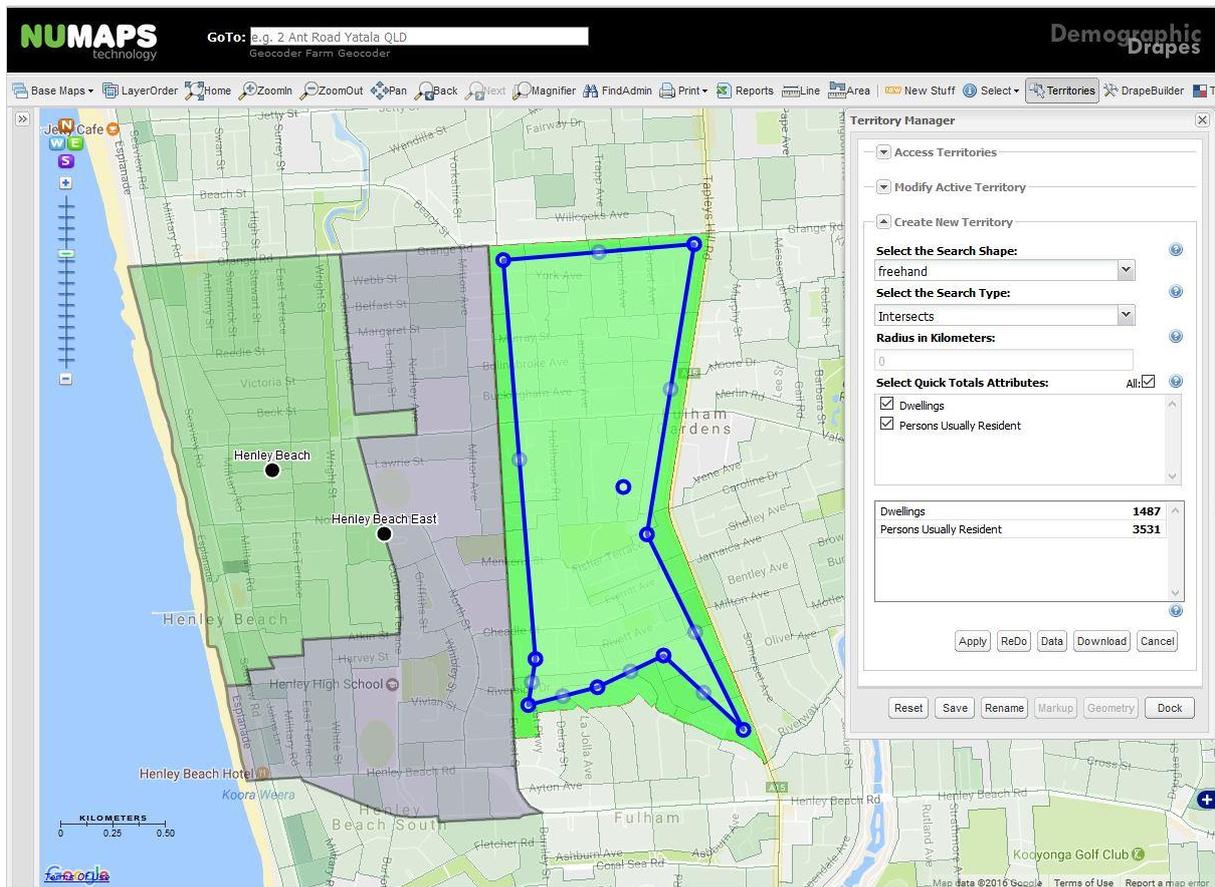


Fig 1. Territory Manager

Territory create tool that allows the user to stretch the boundary to capture more or less Meshblocks into a territory to get as close as possible to 1500 dwellings.

It's also important to note that there can be up to 250 different ABS Census statistical items associated with each statistical area. Attributes such as education level counts, age counts, gender counts, heritage counts, income range counts, population counts, dwelling counts, etc. It is even possible to monitor the territory creation process via a formula of attribute items. When building the territory, these attributes are also aggregated so that a territory inherits all these values providing a statistical summary for each territory created. This provides a value-added geo-demographic feature to the building and maintaining of user-specific territories on this system. The online user also has access to other target analysis tools within the NuMaps environment that can help identify priority areas for establishing a new territory.

This process is typically undertaken at the Franchisor level with each user having their own logins. During the Franchise sale process, these managers need to be able to build a 'proposed territory' paying careful attention to existing homogeneous territories within their Franchisor area. Once the franchise sale has been completed the map can be converted into an actual or operational territory that immediately becomes searchable via Territory Finder. The prospective Franchisee will also receive a link to the online territory QuickMap viewer (hyperlinkMap) so they will know the exact extent of their territory.

Job Allocation – Territory Finder

Once a range of territories are built the boundaries are automatically loaded into the Territory Finder database ready for searching. This is separate to the main mapping database in order to efficiently separate the different types of process requests (e.g. Territory Finder is considered mission critical). It's this database that is used to allocate the jobs associated with a customer enquiry for franchisee services. The end customer is able to log service enquiries via an online application (embedded link and/or mobile link) or via the call-centre application – Territory Finder. The customer-facing online form can be easily

integrated into the Franchisor’s main website via an embedded iframe link providing open access to Territory Finder enquiry form.

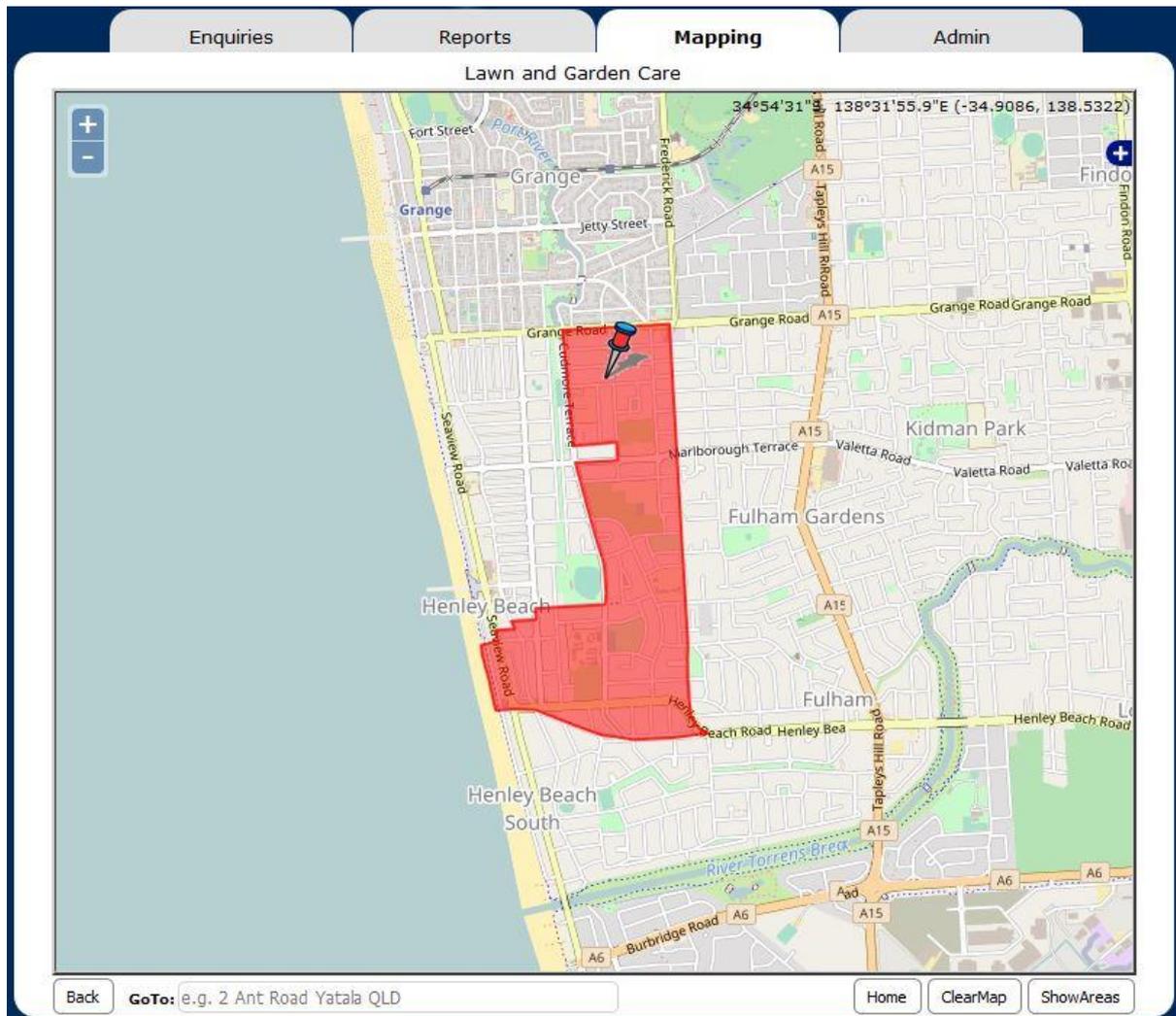


Fig 2. Territory Finder (desktop app)

Searching for any Territory at address at 20 Margaret St Henley beach SA finds the territory highlighted in red on map.

The user enters details about their service request such as location address, contact details and services required amongst other items. Typically, the call-centre will ask for more job-related detail whilst the online user will be presented with a minimalist form to complete. The location of the customer’s address is assumed to be where the service will be required and is geocoded or transformed into a latitude and longitude. That map position is used to quickly determine in which territory it resides (see Fig 2.). If the query finds an existing territory the system immediately sends appropriate emails and texts to the relevant people within the Franchisor’s business and also as a confirmation to the enquirer. At the same time, all information associated with the enquiry is logged to the database for auditing and management reporting purposes.

Because Territory Finder is a mission critical resource, it is maintained in the cloud so that resources can be scaled and the site can achieve maximum uptime. It remains operational all the time and, provided access via the internet is available, potential customers should be able to make a service enquiry at any time.

Management – Territory Finder

As the enquiries are being serviced the database continues to log the enquiries and the subsequent results of the search. The Territory Finder application has additional management functions that are only available to internal users with the appropriate privileges. For example, call-centre operators can only access the

enquiry form whilst Franchisor Managers will also have access to the Reports and Mapping tools for their areas and yet an Administrator will also get access to the Admin tool.

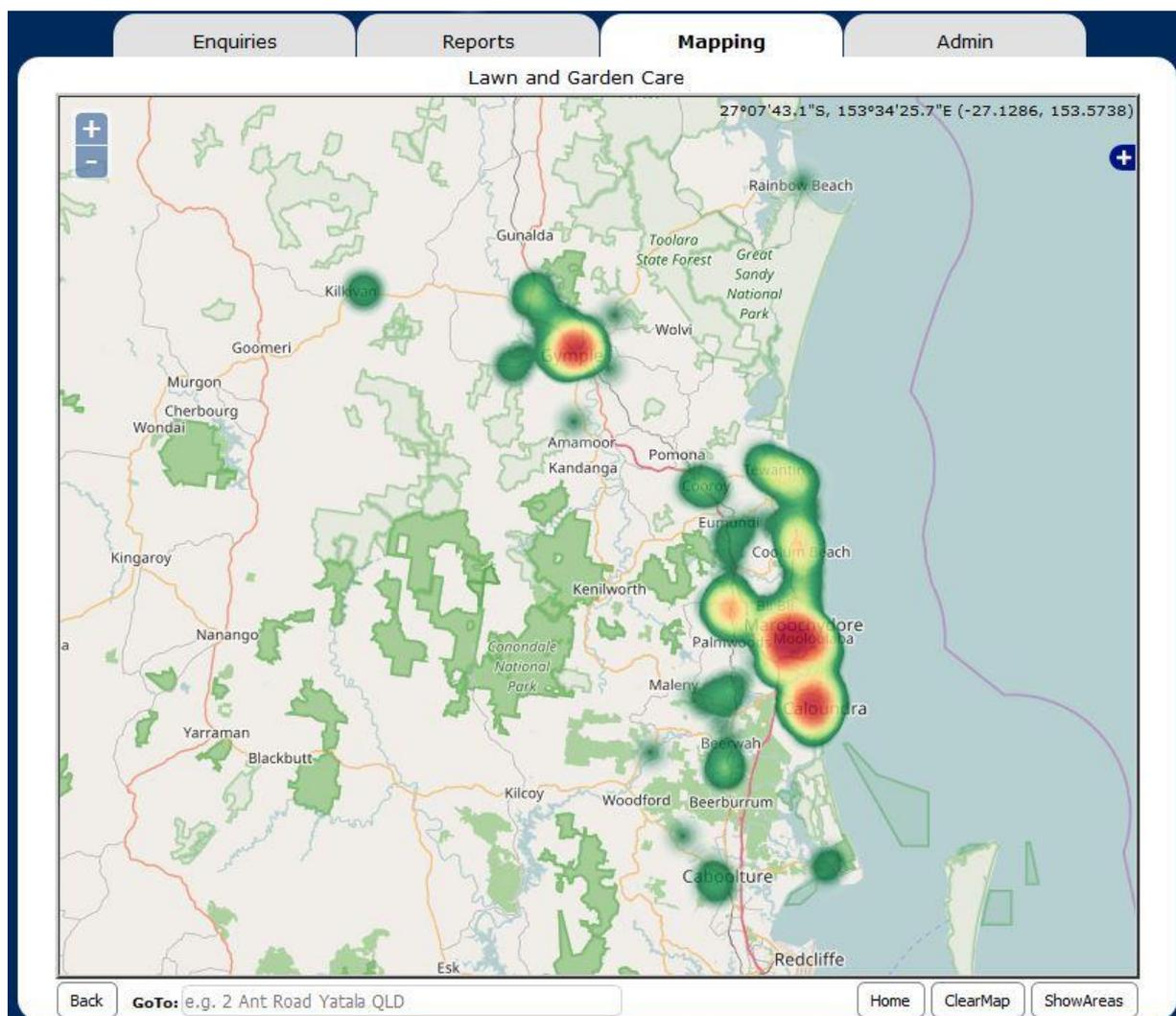


Fig 3. Territory Finder (desktop app)
Heatmap of all filtered enquiries found during a full dump report

The Reports tool allows the internal user to list the enquires for on-screen reports and subsequent downloading into excel (csv) files. The user can select a full dump report, total enquiry counts by dates, suburbs or franchisor areas. They can filter the reports by other specific attributes such as date ranges. The full dump report option also enables the user to display the location of the filtered enquiries on a map (in the Mapping tool) in both discrete point symbols and/or a heatmap format reflecting geographic distribution and concentrations of enquiry locations (see Fig 3). Whereas, the totals report also provide charting of grand totals (see Fig 4) depicting enquiries and serviceable enquiries across multiple Franchise Types.

The Mapping tool is used to display all the homogeneous territories (same Type) within a Franchisor Area. The user will select the type of franchise they wish to display and the areas will be overlaid on top of a standard web basemap and also displaying the Franchisor boundary. The location of the Franchisee Address is also highlighted by a clickable map icon. This tool is an easy way for the Franchisor Manager and the Administrator to inspect their Franchisee Territories in relation to the Franchisor area.

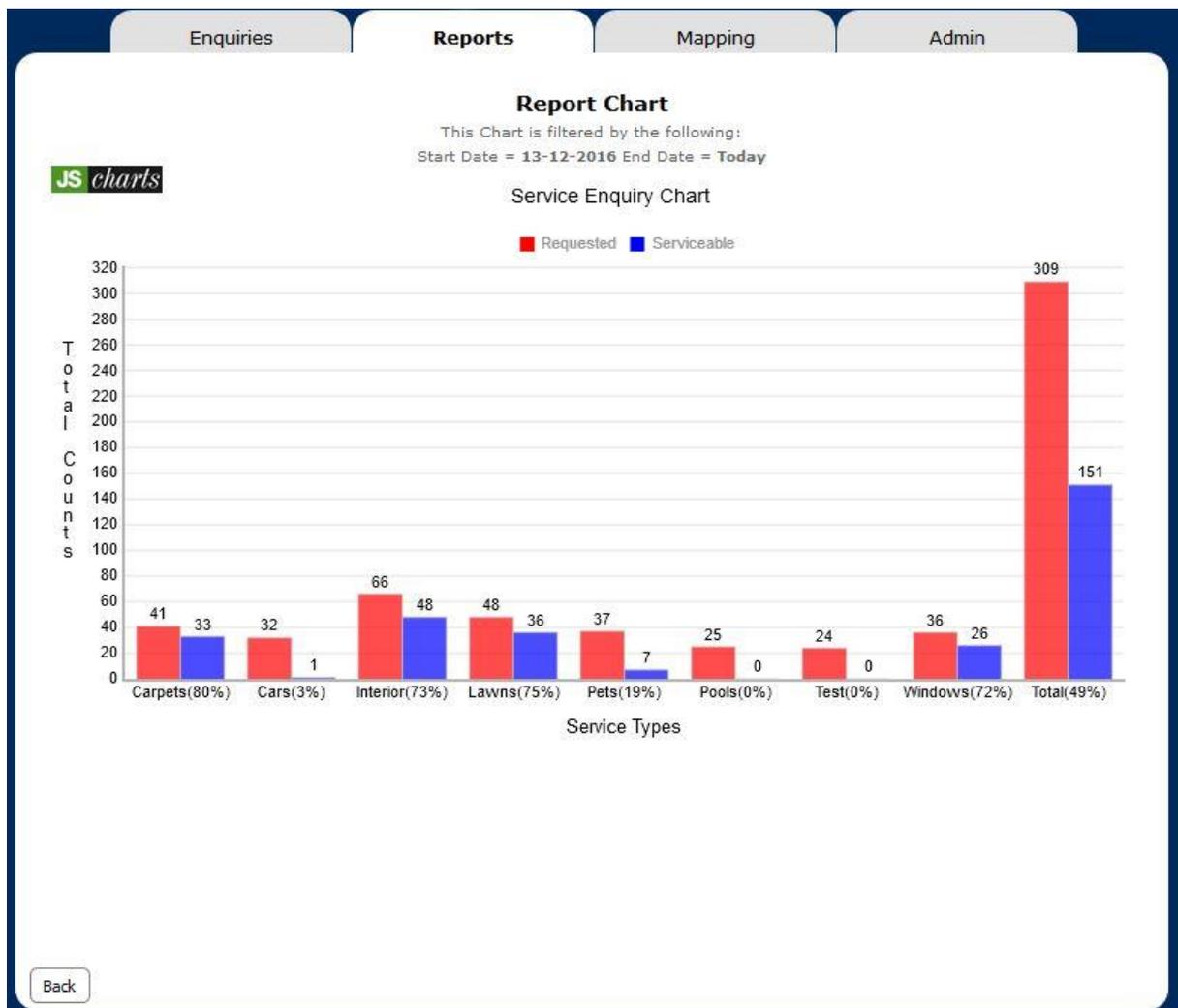


Fig 4. Territory Finder (desktop app)
Chart of the date range report totals row

The Admin tool is required for the Administrator to manage the database holding all the details of the territories, Franchisor areas, other administrative levels and lookup details like Franchise Types and email/text templates. The user needs to be able to continuously change as circumstances require without software modifications. For example, template files are defined by the Administrator for the different emails and texts that are issued as a result of each enquiry providing a convenient level of user customisation.

Conclusion

The Territory Management process is applicable to many industries no more so than to the Franchise Industry. With our Territory Manager and Territory Finder online applications we have developed a proven complete system that works and with customisation can be easily deployed for many different territory-driven industries.

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